

Title (en)

Semiconductor emitting device and process for preparing the same.

Title (de)

Lichtemittierende Halbleiteranordnung und deren Herstellungsverfahren.

Title (fr)

Dispositif semi-conducteur émetteur de lumière et procédé de fabrication.

Publication

**EP 0380106 A2 19900801 (EN)**

Application

**EP 90101517 A 19900125**

Priority

- JP 1496289 A 19890126
- JP 5779789 A 19890313

Abstract (en)

A semiconductor emitting device capable of emitting blue light comprises a first clad layer (20), an active layer (21) and a second clad layer (22), successively formed on a semiconductor substrate (15), where a nitrogen-doped p-type ZnSSe thin film of low-resistivity having a carrier concentration of not less than  $1 \times 10^{16} \text{ cm}^{-3}$  and a resistivity of not more than  $10 \text{ } \Omega \cdot \text{cm}$  is used as the first or the second clad layer (20, 22).

IPC 1-7

**H01L 21/363**; **H01L 21/365**; **H01L 33/00**; **H01S 3/19**

IPC 8 full level

**H01L 33/00** (2010.01); **H01L 33/06** (2010.01); **H01L 33/28** (2010.01); **H01S 5/327** (2006.01); **H01S 5/347** (2006.01)

CPC (source: EP US)

**B82Y 20/00** (2013.01 - EP US); **H01L 33/0083** (2013.01 - EP US); **H01L 33/0087** (2013.01 - EP US); **H01L 33/06** (2013.01 - EP US); **H01L 33/28** (2013.01 - EP US); **H01S 5/327** (2013.01 - EP US); **H01S 5/347** (2013.01 - EP US)

Cited by

EP0766297A3; EP0523597A3; EP1760850A3; EP0807983A3; EP0708488A1; US5766345A; US5404027A; US5538918A; US5547897A; US5513199A; EP0532104A1; CN102602984A; AU654726B2; EP0670593A3; CN1097317C; CN1321488C; US7772586B2; WO9502710A1; WO9221170A3

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**EP 0380106 A2 19900801**; **EP 0380106 A3 19910918**; **EP 0380106 B1 19971105**; DE 69031660 D1 19971211; DE 69031660 T2 19980610; US 5081632 A 19920114; US 5278856 A 19940111

DOCDB simple family (application)

**EP 90101517 A 19900125**; DE 69031660 T 19900125; US 46938290 A 19900124; US 81193891 A 19911223